

CLAIMS

- [1] A pre-cast concrete staircase block for constructing a staircase, which is formed in a triangle pillar, comprising a horizontal stepping surface, a rise surface perpendicular to the stepping surface, and a rear surface which connects diagonally the stepping surface and the rise surface at respective edges thereof, the rear surface having a recess for reducing the weight of the block, and the recess having round parts (partially cylindrical recessed surface) with a specified radius at inner corner parts of the recess.
- [2] A staircase block according to claim 1 further comprising another recess for reducing the weight of the block in the rise surface.
- [3] A staircase block according to claim 2 further comprising displacement prevention grooves in respective side surfaces thereof.
- [4] A method of constructing a staircase using the staircase block according to any one of claims 1 to 3, comprising the steps of:
  - a first step of laying a foundation mortar on the tamped face of the inclined land, and temporarily placing the staircase blocks on the foundation mortar;
  - a second step of producing a gap between the rear surface of the block and the upper surface of the foundation mortar by lifting the minimum angle side of the block by 3-4 cm with a camber;
  - a third step of levelling the corner of the rise surface of the staircase blocks by hammering it with a sand hammer while checking the horizon with a level placed on the front edge of the stepping surface of the block;
  - a fourth step of adjusting the slant angle of the stepping surface of the block by pushing and pulling the camber while checking the slant angle with a slant (a slant angle measuring device);
  - a fifth step of filling-up uniformly the gap produced in the second step with mortar;
  - sixth and seventh steps of filling-up the trace of the withdrawn camber with mortar, and inserting joint filler into the gap between adjacent blocks; and
  - a final step of finishing the joint and completing the construction work by cleaning residual sands and dusts.